MULTIMEDIA UNIVERSITY

STUDENT ID NO.

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2016 / 2017 SESSION

PPE0044 – BASIC MICROECONOMICS

(Foundation in Business)

7 OCTOBER 2016
3.00 p.m. – 5.00 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **ELEVEN (11)** pages.
2. Answer **ALL** the questions in **Sections A and B.**
3. Shade your answers for **Section A** on the OMR sheet. Write your answers for **Section B** in the Answer Booklet.

SECTION A : MULTIPLE-CHOICE QUESTIONS [40 MARKS]

Instructions: Answer **ALL** questions in this section. Shade your answers on the **OMR** sheet.

1. If a decrease in the price of football tickets increases the total revenue of the athletic department, it is evident that demand is _____.
   A. price elastic
   B. price inelastic
   C. perfectly inelastic
   D. unit elastic with respect to price

2. Price elasticity of supply is always _____.
   A. negative
   B. positive
   C. greater than one
   D. the same as price elasticity of demand

3. Stygiga Computer Company wants to increase the quantity of computers it sells by 5 percent. If the price elasticity of demand is -2.5 percent, the company must _____.
   A. increase the price by 2.0%
   B. increase the price by 0.5%
   C. decrease the price by 0.5%
   D. decrease the price by 2.0%

4. The number of CDs purchased increased by 50 percent when consumers' income increased by 10 percent. Assuming other factors are held constant, CDs would be classified as _____.
   A. social goods
   B. normal goods
   C. inferior goods
   D. None of the above

5. Related to economics in practice, which of the following, if true, would most effectively undermine the argument that raising cigarette taxes reduce the number of people who smoke cigarettes?
   A. The supply for cigarettes is relatively elastic.
   B. The demand for cigarettes is relatively elastic.
   C. The supply for cigarettes is relatively inelastic.
   D. The demand for cigarettes is relatively inelastic.

Continued...

6. With the increased usage of cell-phone services, what has happened to the price elasticity of demand for land-line telephone services?
   A. It has become more price elastic.
   B. It has become more price inelastic.
   C. It has become more income elastic.
   D. The absolute value of the price elasticity has probably gone down.

7. If a 1 percent increase in the price of X increases the quantity demanded for Y by 2 percent, then X and Y are _____.
   A. substitutes and the cross elasticity of demand equals 2
   B. substitutes and the cross elasticity of demand equals ½
   C. complements and the cross elasticity of demand equals 2
   D. complements and the income elasticity of demand equals 2

8. If the government wants to raise tax revenue and shift most of the tax burden to the sellers, it would impose a tax on good with a _____.
   A. flat (elastic) demand curve and a flat (inelastic) supply curve
   B. steep (inelastic) demand curve and a flat (elastic) supply curve
   C. flat (elastic) demand curve and a steep (inelastic) supply curve
   D. steep (inelastic) demand curve and steep (inelastic) supply curve

9. The longer the time period those suppliers have to adjust to price changes, the _____.
   A. lower will be the price elasticity of supply
   B. greater will be the price elasticity of supply
   C. lower will be the price elasticity of demand
   D. greater will be the price elasticity of demand

10. If a consumer receives 10 units of utility from consuming four candy bars, and 15 units of utility from consuming five candy bars, the marginal utility of the fifth candy bar is _____.
   A. 5
   B. 10
   C. 15
   D. 25

Continued...

11. Which of the following is likely to occur as a result of the law of diminishing marginal utility?
    A. Jason enjoyed his second slice of pizza more than his first.
    B. Jaselyn's utility from her second apple was less than her satisfaction from her first orange.
    C. Wesley enjoyed his second cup of lemon tea less than his first cup, other things remain constant.
    D. Shereen's utility from her first chocolate bar is greater than Rachel's utility from her second chocolate bar.

12. Jamal spends his income on books and music CDs. If the price of a CD is five times the price of a book and if Jamal is maximising his total utility, he will buy _____.
    A. five times of CDs more than books
    B. five times of books more than CDs
    C. both goods until the marginal utility of the last book purchased is five times the marginal utility of the last CD purchased
    D. both goods until the marginal utility of the last CD purchased is five times the marginal utility of the last book purchased

13. If corn is an inferior good, what happen if the price of corn falls?
    A. Both the income and substitution effects reinforce each other to increase the quantity demanded.
    B. The income and substitution effects offset each other but the price effect of an inferior good leads consumer to buy less corn.
    C. The income effect which causes consumers to increase their corn purchase is larger than the substitution effect which causes consumers to reduce their corn purchase, resulting in a net increase in quantity demanded.
    D. The income effect which causes consumers to reduce their corn purchase is smaller than the substitution effect which causes consumers to increase their corn purchase, resulting in a net increase in quantity demanded.

14. Suppose that initially the price of a burger is RM3, and the price of a bottle of coke is RM2. If the price of a bottle of coke increases, then the relative price of burger _____.
    A. increases
    B. decreases
    C. stays the same, but the relative price of coke increases
    D. stays the same, but the relative price of coke decreases

15. Mr. Maizan was asked to rank his preferences within three market baskets, X, Y, and Z. If he prefers Y to Z but does not care if he gets X or Y, then _____.
    A. X is on a higher indifference curve than Y
    B. Z is on a higher indifference curve than X
    C. both X and Y are on a higher indifference curve than Z
    D. Y is on a higher indifference curve than Z, but it is not possible to determine whether Z is on a higher, lower, or the same indifference curve as X

Continued...

16. In the indifference curve diagram, consumers reach higher indifference curves when _____.
    A. the price of either good falls
    B. the price of either good rises
    C. the price of only the good measured along the *y*-axis increases
    D. the price of only the good measured along the *x*-axis increases

Refer to ***Exhibit 1*** for the cost information of the Creamy Crisp Doughnut Company to answer question no. 17.

Entrepreneur's potential earnings as a salaried worker	RM50,000
Annual lease on building	RM22,000
Annual revenue from operations	RM380,000
Payments to workers	RM120,000
Utilities (electricity, water, disposal) costs	RM8,000
Entrepreneur's potential economic profit from the next best entrepreneurial activity	RM80,000
Entrepreneur's forgone interest on personal funds used to finance the business	RM6,000

Exhibit 1

17. Refer to ***Exhibit 1***. Creamy Crisp's total implicit costs, including a normal profit are _____.
    A. RM94,000
    B. RM136,000
    C. RM150,000
    D. RM156,000

18. Which of the following statements concerning the relationships between total product (TP), average product (AP), and marginal product (MP) is **NOT** true?
    A. MP cuts AP at the maximum point of AP
    B. AP continues to rise so long as TP is rising
    C. AP reaches its maximum before TP reaches its maximum
    D. TP reaches its maximum when the MP of the variable input becomes zero

19. If in the short run a firm's total product is increasing, then its _____.
    A. marginal product must be decreasing
    B. average product must also be increasing
    C. marginal product must also be increasing
    D. marginal product could be either increasing or decreasing

Continued...

20. Both Kate and Kyle own candy factories. Kate's factory has low fixed costs and high variable costs. Kyle's factory has high fixed costs and low variable costs. Currently, each factory is producing 1,000 boxes of candy at the same total cost. Complete the following statement with the correct answer. If each produces _____.
    A. less, their costs will be equal
    B. more, their costs will be equal
    C. less, the costs of Kate's factory will exceed those of Kyle's factory
    D. more, the costs of Kate's factory will exceed those of Kyle's factory

21. The Framing Gallery frames posters and has total fixed costs of RM1,000. The Framing Gallery is currently framing _____ posters if its average variable cost is RM20 and its average total cost is RM30.
    A. 5
    B. 25
    C. 100
    D. None of the above

22. The average variable cost of producing 100 sundaes is RM3. At this level of output, average variable cost is minimised. Which of the following statements is **TRUE**?
    A. Marginal cost of the 100th sundae is RM300.
    B. Total cost of producing 100 sundaes is RM300.
    C. Average fixed cost is minimised at an output less than 100 sundaes.
    D. Average total cost is minimised at an output greater than 100 sundaes.

23. Specialisation leads to economies of scale because _____.
    A. workers spend less time switching tasks
    B. repetition leads to increased productivity
    C. more people are able to perform the same task
    D. both A and B are correct

24. A firm which sells product _____ is categorised as a perfect competitive firm.
    A. under different brand names
    B. to different customers at different prices
    C. that has many perfect substitutes produced by other firms
    D. that has many perfect complements produced by other firms

Refer to ***Exhibit 2*** for question no. 25.

Quantity (shoes per day)	Total cost (RM)
0	50
1	150
2	205
3	240
4	300
5	355

Exhibit 2

Continued...

25. Refer to ***Exhibit 2***. It shows the total cost (TC) for Milly's Shoe Company per day. Each pair of shoes cost RM80 and Milly's Shoe Company is a perfect competitive firm. This company will achieve its maximum economic profit at _____ output level.
    A. 0
    B. 3
    C. 4
    D. 5

26. A perfectly competitive firm will _____ when MR > MC and P > AVC.
    A. leave the industry
    B. increase its output
    C. decrease its output
    D. not change its behaviour

27. Cathy Cupcake mentioned that it needs to sell 9,000 cupcakes a year to obtain maximum profit. Cathy has a revenue of RM6,000 and has two types of costs. First, she pays RM3,000 for its store rental. Second, Cathy incurs an additional cost of RM4,000 for ingredients. Should Cathy Cupcake shut down in the short run?
    A. Yes, because she is earning an economic loss.
    B. No, because she can cover all of her variable costs.
    C. No, because she is earning positive economic profit.
    D. Yes, because she cannot cover all of her fixed costs.

28. XYZ Computer Company has a monopoly on the sale of a specialised 3D printer. If it sells two of these printers, its total revenue is RM1,000 and if it sells three 3D printers, its total revenue is RM 1,600. The marginal revenue of the third 3D printer sold is _____.
    A. RM200
    B. RM300
    C. RM600
    D. RM2,600

29. Unlikely for perfectly competitive firms, whose marginal revenue curves are the same as their individual demand curves, a monopolist's marginal revenue curve differs from its demand curve because _____.
    A. a monopoly has no market power
    B. a monopoly's demand curve is vertical
    C. a monopoly must lower the price on all units to sell one more unit of output
    D. a monopoly can sell all the output it wants without having any impact on market price

Continued...

Exhibit 3 shows the demand schedule for a single-price monopoly. Refer to ***Exhibit 3*** for question no. 30.

Price (RM)	Quantity (units)
8	1
6	2
5	3
4	4
3	5

Exhibit 3

30. Refer to ***Exhibit 3***. If the marginal cost is RM3, the profit maximising output for the monopoly will be between _____.
    A. 1 to 2 units
    B. 2 to 3 units
    C. 3 to 4 units
    D. 4 to 5 units

31. Suppose that a monopoly is currently producing the quantity at which marginal revenue is less than marginal cost. The monopoly can increase its profit by _____.
    A. shutting down
    B. raising its price and decreasing its output
    C. lowering its price and decreasing its output
    D. not changing its price and increasing its output

32. The Keep-Dry Company monopolises the sale of umbrella hats. The company is currently setting marginal revenue equal to marginal cost and selling 2,500 umbrella hats at a price of RM40 each. Total costs for the company are RM180,000. It can be concluded that the monopolist is _____.
    A. earning normal profit
    B. incurring economic loss
    C. earning economic profit
    D. there is not enough information to answer the question

33. Compared to a perfectly competitive market, a single-price monopoly sets _____.
    A. a higher price
    B. a lower price
    C. a price that might be higher, lower, or the same depending on whether the monopoly's marginal revenue curve lies above, below, or on its demand curve
    D. a price that might be higher, lower, or the same depending on whether the monopoly's marginal cost curve lies above, below, or on its marginal revenue curve

Continued...

34. Which of the following quotes by a store manager describes price discrimination in action?
    A. "Since bulk goods are cheaper to package, I can offer a lower price."
    B. "We sell the product in a price in which our marginal revenue equals total variable costs."
    C. "I can get a 5-litre jug of orange juice from the supplier for less than five 1-litre cartons, so I can sell it for less per litre."
    D. "I offer discounts if you buy 10 apple juices in one box, although it costs me the same as if I split it up and sell them separately."

35. A firm in monopolistic competition definitely incurs an economic loss if _____.
    A. price is greater than marginal cost
    B. price is less than average total cost
    C. marginal revenue equals marginal cost
    D. marginal revenue is less than average total cost

36. Which of the following is **FALSE** regarding the long run for a firm in monopolistic competition?
    A. Price exceeds marginal cost.
    B. Price equals average total cost.
    C. The firm's economic profit equals zero.
    D. Marginal cost equals average total cost.

37. Suppose a monopolistically competitive firm sells 15 units of a product at a price of RM10. Calculate its marginal revenue per unit of output if it sells 5 more units of output when it reduced its price to RM9.
    A. RM6
    B. RM9
    C. RM10
    D. RM30

38. Walsin Inc., a firm selling stainless steels competes with a few other firms in Melaka, Malaysia. Walsin Inc. operates in _____.
    A. a monopoly
    B. an oligopoly
    C. a perfectly competitive market
    D. a monopolistically competitive market

39. Which of the following is found **ONLY** in oligopoly?
    A. Entry into the industry is blocked
    B. Producers who sell identical products
    C. One firm's actions affect another firm's profit
    D. Sellers face a downward sloping demand curve for their product

Continued...

40. According to the kinked demand curve theory, if a single firm _____ price, other firms will _____.
    A. lowers; raise price
    B. raises; lower price
    C. raises; maintain their prices
    D. lowers; maintain their prices

SECTION B: STRUCTURED QUESTIONS [60 MARKS]

Instructions: Answer **ALL** questions in this section. Write your answers in the Answer Booklet.

Question 1

Suppose Jason spends RM100 per month on pizza and CDs. The price of pizza is RM10 per piece and the price of CD is RM20 per piece. His utility from the consumption of these goods is shown in ***Exhibit 4***.

Pizza		CDs	
Quantity	Marginal Utility	Quantity	Marginal Utility
0	0	0	0
1	95	1	170
2	85	2	150
3	75	3	130
4	65	4	110
5	55	5	90

Exhibit 4

Based on ***Exhibit 4***,

a) calculate Jason's marginal utility per price (MU/P) from consuming pizza and CDs.
(5 marks)

b) what is the combination of pizza and CDs should Jason consume in order to maximise his total utility? Show your working and briefly explain.
(3 marks)

c) currently if Jason is consuming 2 pizzas and 4 CDs, what should Jason do to maximise his total utility? Explain your answer.
(3 marks)

d) draw a budget line for Jason with CDs on vertical axis and pizza on horizontal axis. Indicate the intercepts accordingly.
(2 marks)

e) what is the slope of the budget line?
(2 marks)

f) if the combination in part (b) is the optimum consumption point for Jason, draw an indifference curve to show the consumer equilibrium point on the budget line that you have drawn in part (d).
(2 marks)

Continued...

g) if the price of CD falls to RM10 per piece, what would happen to Jason's budget line? Draw a new budget line and compare with the one before the change in price. Be sure to indicate the new intercepts.

(3 marks)

[TOTAL 20 MARKS]

Question 2

Part A

Sunshine florist is a florist specialising in floral arrangements for weddings, graduations, etc. Sunshine florist has a fixed cost associated with space and equipment of RM100 per day. Each worker is paid RM50 per day. The daily production function of Sunshine florist is shown in ***Exhibit 5***.

Quantity of labour	No. of floral arrangements
0	0
1	5
2	9
3	12
4	14
5	15

Exhibit 5

Based on ***Exhibit 5***, answer the following question:

a) State the formula for marginal product and calculate marginal product of each worker.

(3.5 marks)

b) What principle explains the figures you obtained for marginal product? Explain the principle.

(3 marks)

c) Calculate the total variable costs (TVC) and marginal cost (MC) of Sunshine florist.

(5.5 marks)

d) Compare the marginal product and marginal cost that you obtained. Do you see any relationship? Briefly explain.

(2 marks)

Part B

Sketch a diagram to show the long run average total cost (LRATC) of a firm experiencing economies of scale and then followed by diseconomies of scale as the firm expands its output. Explain the meaning of economies of scale (EOS) and diseconomies of scale (DOS).

(6 marks)

[TOTAL 20 MARKS]

Continued...

Question 3

Part A

Sucrose Farms is a business engaged in sugar cane in Agraria. Sugarcane is a standardised product. Sucrose Farm's costs and revenue are as follows:

MC = AVC at RM15
MC = AR at RM20
At the profit maximising level of output, ATC = RM25

Based on the above,

a) how will this firm determine its profit maximising level of output?
(1 mark)

b) what price will this firm charge? Explain how the firm determine its price.
(3 marks)

c) should Sucrose Farms produce in the short run? Why or why not?
(2 marks)

d) will Sucrose Farms earn economic profit or incur an economic loss? State the reason.
(2 marks)

e) illustrate in a diagram the situation that Sucrose Farms are experiencing.
(5 marks)

Part B

Suppose firms in a perfect competitive market are currently in their short run equilibrium and operating under the condition P<ATC. Explain with a diagram how the long run equilibrium will be achieved.
(7 marks)

[TOTAL 20 MARKS]

End of paper